

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

No. C-94-1633 MHP

LINEAR TECHNOLOGY CORP.,

Plaintiff,

vs.

MICREL, INC.

Defendant.

**MEMORANDUM & ORDER**  
**Granting in part and denying in**  
**part Defendant's motion for partial**  
**summary judgment**

On May 9, 1994, plaintiff Linear Technology Corporation ("LTC") brought this action against defendant Micrel, Inc. alleging infringement of United States Patent Number 4,755,741 ("741 Patent") and the accompanying reexamination certificates. Now before the court is the defendant's motion for partial summary adjudication as to the issue of the validity of one of the reexamination certificates and the availability of the defense of intervening rights. Having considered the arguments presented and for the reasons stated below, the court enters the following memorandum and order.

**BACKGROUND**

**I. Patent History**

All agree on the following facts: On July 5, 1988 the '741 Patent pertaining to adaptive transistor drive circuitry was issued including, *inter alia*, claims 22 and 32, ("Claim 22" and "Claim 32" respectively), which are asserted in this law suit. The other asserted claims in this action are claims 36-44, 46, 47 and 49. Jt. Stmt. of Undisputed Facts, No. 24. The '741 Patent covers an adaptive transistor drive circuit for use in electrical devices where a transistor is used "as a switch in a switching voltage regulator." U.S. Pat. No. 4,755,741, col. 1, l. 17. The claimed inventive

1 improvements in the '741 Patent include the ability of the drive circuit to operate across a range of  
2 collector currents and temperatures and to operate with higher electrical efficiency than previous  
3 circuits. Id. at col. 2, ll. 43–66.

4 On May 14, 1991, the B1 Reexamination Certificate for the '741 Patent ("B1 Certificate")  
5 issued, following a reexamination of the '741 Patent ("Reexam I"). The text of the amended claims  
6 was not included in the B1 Certificate, although it is present in the public record of the  
7 reexamination history. In 1994, during the second reexamination proceeding ("Reexam II"), the  
8 Patent and Trademark Office ("PTO") notified LTC of the printing mistake and stated that a  
9 certificate of correction could be requested. See Reexam II, Paper No. 9. There is no indication in  
10 the record that LTC ever requested a certificate of correction.

11 LTC sent a notice of possible infringement referencing the '741 Patent to Micrel on April 3,  
12 1993, and on May 9, 1994 LTC filed suit against Micrel alleging infringement of the '741 Patent and  
13 the B1 Certificate. Oliver Dec., Exh. 7 and Exh. 8 at 2. Defendant Micrel requested reexamination  
14 of the amended '741 Patent on September 9, 1994 ("Reexam III"). Reexam II and Reexam III were  
15 merged in January 1995, and on December 26, 1995 the B2 Reexamination Certificate ("B2  
16 Certificate") issued.

17 During Reexam I, the amendments to Claim 32 narrowed the scope of the amended claim and  
18 it is not identical to any original claim in the '741 Patent. See Jt. Stmt. of Undisputed Facts Nos. 5,  
19 25. During Reexams II and III, the Patent Office rejected Claims 22 and 32 on two separate  
20 occasions based on prior art; in response to these rejections, LTC made amendments to the claims.  
21 Id. Nos. 13–15. In the same year that the lawsuit and Reexam III commenced, Micrel began selling  
22 certain accused products—MIC2171, MIC2172, and MIC32172 circuits. See id. No. 42. Before the  
23 December 26, 1995 issue of the B2 Certificate Micrel had already shipped 279,655 units of those  
24 products. See id. No. 42.

25 Micrel later changed the design of its devices to eliminate the circuitry which formed the  
26 basis of LTC's infringement contentions. LTC has conceded that the manufacture and use of the  
27 redesigned devices would not infringe the asserted claims in the '741 Patent and the reexamination  
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1 certificates thereto. See Pl's Responses to Micrels' Requests for Admission Nos. 72–75 (Feb. 18,  
2 2005) in Morrill Dec., Exh. G. Plaintiff has also conceded that none of the claims 36–44, 46–47 and  
3 49 is “identical” in scope to any earlier claim. Jt. Stmt of Undisputed Facts Nos 17, 18, 20, 21,  
4 26–39.

5 The parties are in dispute over whether Claims 22 and 32 have changed in scope since the B1  
6 Certificate or the ‘741 Patent. The parties also differ over the amount that Micrel had in inventory  
7 and the amount that Micrel had spent in “substantial preparation” of further infringing devices as of  
8 December 26, 1995. Defendant alleges that it had 309,294 of accused products in inventory and had  
9 spent \$500,000 in “substantial preparation” as of the date of the B2 Certificate’s issue on December  
10 26, 1995. Plaintiff contends that Micrel had at most 51,600 units of accused products in inventory  
11 and disputes the amount spent in developing the accused products.

## 12 13 II. Procedural Posture

14 This actions was initially assigned to United States District Court Judge Eugene F. Lynch,  
15 LTC’s complaint alleges infringement of the ‘741 Patent and the associated reexamination  
16 certificates. On February 26, 1997, Judge Lynch denied Micrel’s motion for summary judgment on  
17 the question of the validity of the ‘741 Patent, identifying a genuine issue of material fact regarding  
18 the applicability of the on-sale bar provision of 35 U.S.C. section 102. In the same order, Judge  
19 Lynch bifurcated this action, permitting the on-sale bar issue to proceed to trial while staying all  
20 other issues. Approximately six months later, the case was reassigned to this court, and the court  
21 subsequently conducted a bench trial on the issue of on-sale bar invalidity. On August 19, 1999 this  
22 court found the ‘741 Patent invalid under section 102(b), entering judgment for Micrel accordingly.  
23 On appeal, the Federal Circuit affirmed this court’s decision in part, reversed in part, and remanded.  
24 See Linear Tech. Corp. v. Micrel, Inc., 275 F.3d 1040 (Fed. Cir. 2002), cert denied, 538 U.S. 1052  
25 (2003).

26 On January 24, 2004 the court conducted a limited claim construction for the ‘741 Patent and  
27 accompanying certificates, construing the word “saturation” to mean “the state in which the ratio of  
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1 collector-current to base-current is forced lower by excess base current” and the phrase “in  
2 saturation” to mean “the working of the covered invention consistently at a state of forced current  
3 gain.” Memorandum & Order, No. C 94-1633 MHP, slip op. at 12, 17 (Jan. 22, 2004).

4 Now before the court are the parties’ memoranda with respect to (1) the validity of the B1  
5 Certificate, (2) the availability of the defense of intervening rights to limit the period within which  
6 infringement damages can be calculated, (3) the amounts in inventory, (4) the amount of money  
7 spent developing the accused products and (5) the issue of whether Micrel’s redesigned products are  
8 non-infringing.

## 9 10 LEGAL STANDARD

### 11 I. Summary Judgment

12 As in any other civil action, summary judgment is proper in a patent infringement action  
13 when the pleadings, discovery, and affidavits show that there is “no genuine issue as to any material  
14 fact and that the moving party is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c). See  
15 also Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed. Cir.), cert. denied, 516 U.S.  
16 987 (1995). Material facts are those which may affect the outcome of the case. Anderson v. Liberty  
17 Lobby, Inc., 477 U.S. 242, 248 (1986). A dispute as to a material fact is genuine if there is sufficient  
18 evidence for a reasonable jury to return a verdict in favor of the nonmoving party. Id.

19 The party moving for summary judgment bears the burden of identifying those portions of the  
20 pleadings, discovery, and affidavits that demonstrate the absence of a genuine issue of material fact.  
21 Celotex Corp. v. Cattrett, 477 U.S. 317, 323 (1986). On an issue for which the opposing party will  
22 have the burden of proof at trial, the moving party need only point out “that there is an absence of  
23 evidence to support the nonmoving party’s case.” Id. at 325; Crown Operations Int’l, Ltd. v. Solutia,  
24 Inc., 289 F.3d 1367, 1377 (Fed. Cir. 2002). On the other hand, where the moving party bears the  
25 burden of proof on an issue, it must submit evidence sufficient to establish that no reasonable jury  
26 could find against it on that issue at trial. See Frank’s Casing Crew & Rental Tools, Inc. v.  
27 Weatherford Int’l, Inc., 389 F.3d 1370, 1376 (Fed. Cir. 2004); Gart v. Logitech, Inc., 254 F.3d 1334,

1339 (Fed. Cir. 2001), cert. denied, 534 U.S. 1114 (2002).

Once the moving party meets its initial burden, the nonmoving party must go beyond the pleadings and, by its own affidavits or discovery, “set forth specific facts showing that there is a genuine issue for trial.” Fed. R. Civ. P. 56(e). Mere allegations or denials do not defeat a moving party’s allegations. Id.; see also Gasaway v. Northwestern Mut. Life Ins. Co., 26 F.3d 957, 960 (9th Cir. 1994). The court may not make credibility determinations, Anderson, 477 U.S. at 249, and inferences drawn from the facts must be viewed in the light most favorable to the party opposing the motion. Masson v. New Yorker Magazine, 501 U.S. 496, 520 (1991). Nonetheless, even if summary adjudication of an entire claim is not warranted, Federal Rule of Civil Procedure 56(d) allows a court to grant partial summary judgment, thereby reducing the number of facts at issue in a trial. Fed. R. Civ. Pro. 56(d); State Farm Fire & Cas. Co. v. Geary, 699 F. Supp. 756, 759 (N.D. Cal. 1987) (Patel, J.).

## DISCUSSION

Defendant Micrel seeks a determination by this court that: 1) the B1 Certificate is invalid for indefiniteness; 2) Micrel is entitled to absolute intervening rights with respect to products designed and manufactured before the issuance of the B2 Certificate; 3) Micrel's alleged \$500,000 expenditure is “substantial preparation” within the meaning of 35 U.S.C. section 252 and 4) none of Micrel’s products manufactured after a design change infringe claims of the ‘741 Patent and accompanying certificates.

### I. Validity of the B1 Certificate

Micrel contends that the B1 Certificate is invalid as indefinite under the second paragraph of 35 U.S.C. section 112 because of the USPTO printing mistake and LTC’s failure to seek a Certificate of Correction.<sup>1</sup> LTC asserts that the publication mistake does not render the B1 Certificate invalid because the information printed on the B1 Certificate fulfills the statutory requirements under 35 U.S.C. section 307. In the alternative, LTC requests that, if the B1 Certificate is invalid due to the

USPTO printing mistake, the court should retroactively correct the error. For the reasons given below, the court holds that the B1 Certificate is invalid as published and declines to retroactively correct it.

A. The B1 Certificate is Invalid as Published

Pursuant to 35 U.S.C. section 307—the statutory provision which governs the publication of reexamination certificates—the USPTO “will issue and publish a certificate canceling any claim of the patent finally determined to be unpatentable, confirming any claim of the patent determined to be patentable, and incorporating in the patent any proposed amended or new claim determined to be patentable.” 35 U.S.C. § 307(a). Under USPTO reexamination procedure, after a reexamination the agency publishes: 1) a listing of the results of the reexamination and 2) the text of the claims with deleted material in brackets and new material underlined or in italics. See Manual of Patent Examining Procedure § 2290 (8th Ed., May 2004 Rev.) (hereinafter “MPEP”). The B1 Certificate published only the reexamination results, stating that “[a]s a result of reexamination, it has been determined that. . . [C]laims 21 and 32 are determined to be patentable as amended.” Morrill Dec., Exh. C at 2. Although present in the public record of the reexamination history, the text of the amended claims was not included in the B1 Certificate.

LTC’s argument centers on the use of the term “incorporate” in section 307. LTC asserts that the statement that amended claims are “allowable as amended” in the reexamination certificate operates as an “incorporation by reference,” incorporating the claims from the file history into the reexamination certificate. According to LTC, this “incorporation by reference” fulfills the statutory requirement that a reexamination certificate “incorporat[e] into a patent” “any proposed amended or new claim.” 35 U.S.C. § 307(b). Thus, LTC claims that the publication of claims, despite being USPTO practice, is not part of the statutory requirement for a reexamination certificate.<sup>2</sup>

However, LTC’s argument misconstrues the statutory language and misrepresents the purpose of a reexamination certificate. A reexamination certificate is a document that is itself incorporated into the underlying patent. The phrase “incorporating in the patent” is more accurately read to denote that the reexamination certificate should list new and amended claims, which are

1 incorporated into the patent by virtue of being part of the reexamination certificate. The phrase  
2 cannot be read to permit claims from an external document to be incorporated into the patent through  
3 the reexamination certificate.

4 Further, LTC's analogy to a patent incorporating public documents by reference is similarly  
5 misguided. A patent applicant may incorporate external public works into the specification of a  
6 patent by explicit reference. See In re Howarth, 654 F.2d 103, 106 (CCPA 1981) ("an applicant  
7 may, in the interests of economy of time and space, incorporate certain types of documents by  
8 specific reference in his application"). The ability of a patent applicant to incorporate material by  
9 reference into a patent is subject to the "discretion" of the Director of the USPTO. MPEP §  
10 608.01(p); see also General Electric Co. v. Brenner, 407 F.2d 1258, 1262–63 (D.C. Cir. 1968). In  
11 the case at hand, not only is there no evidence that LTC sought leave from the Director of the  
12 USPTO to include other documents by reference, but the B1 Certificate does not make any explicit  
13 references to the reexamination history. It merely omits the text of the amended claims.

14 Moreover, the issuance of a patent has a public notice function, and patentees have a duty to  
15 police their patents. As noted by the Federal Circuit in Southwest Software, "it does not seem to us  
16 to be asking too much to expect a patentee to check a patent when it is issued in order to determine  
17 whether it contains any errors that require the issuance of a certificate of correction." See Southwest  
18 Software, Inc. v. Harlequin Inc., 226 F.3d 1280, 1296 (Fed. Cir. 2000). LTC should have checked  
19 the published version of the B1 Certificate in 1991 to ensure that it included a complete listing of the  
20 claims, and requested a certificate of correction to properly incorporate the new claims. At the very  
21 least, LTC should have applied for correction after it was alerted to the publication error by the  
22 USPTO in 1994. LTC filed no such application. A patent that includes a reexamination certificate  
23 without a listing of amended claims is indefinite under section 112 because the patent does not  
24 "particularly point[] out" and "distinctly claim[]" the new or amended claims. 35 U.S.C. § 112, ¶ 2.  
25 Thus, the B1 Certificate, with its wholesale omission of the amended text, is invalid as published.

26 B. Correction of the Defect in the B1 Certificate

27 Alternatively, LTC argues that even if the certificate is invalid as published, the court should  
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1 use its power to retroactively correct it. LTC contends that the court should retroactively correct the  
2 patent pursuant to the Federal Circuit’s holding in Hoffer v. Microsoft Corp., 405 F.3d 1326 (Fed.  
3 Cir. 2005). In Hoffer, the court held that “when a harmless error in a patent is not subject to  
4 reasonable debate, it can be corrected by the court, as for other legal documents.” Id. at 1331. Thus,  
5 a typographical error in the numbering of the patent claims that rendered a dependent claim invalid  
6 was found to be correctable by the court.

7 However, a district court may retroactively correct a USPTO error in a patent “only if the  
8 error is evident on the face of the patent.” Group One, Ltd. v. Hallmark Cards, Inc., 407 F.3d 1297  
9 (Fed. Cir. 2005). The ability of a court to retroactively correct is subject to the two-part analysis  
10 described in Novo Indus., L.P. v. Micro Molds Corp., 350 F.3d 1348, 1357 (Fed. Cir. 2003). “A  
11 district court can correct a patent only if (1) the correction is not subject to reasonable debate based  
12 on consideration of the claim language and the specification and (2) the prosecution history does not  
13 suggest a different interpretation of the claims.” Id. In Group One the Federal Circuit outlined a  
14 number of situations where errors were deemed not correctable because a reader of the patent “could  
15 not ascertain the error from the face of the patent.” Group One, 407 F.3d at 1303. See Southwest  
16 Software, 226 F.3d at 1296 (where the PTO accidentally omitted pages of computer code from a  
17 patent and the missing code could not be determined by looking at the patent, the court held that the  
18 error was not correctable).<sup>3</sup> See also Arlington Indus., Inc. v. Bridgeport Fittings, Inc., 345 F.3d  
19 1318, 1331 n.1 (Fed. Cir. 2003) (where the PTO erroneously added the word “and” to a claim, and  
20 the error was not obvious, a court could not rewrite the claim to remove the additional word). In  
21 contrast, in Lemelson v. Gen. Mills, Inc., 968 F.2d 1202, 1203 (Fed. Cir. 1992), the court held that  
22 when the subject of a patent is obviously toy cars and not real cars, a court *can* correct the PTO’s  
23 accidental removal of the word “toy” from the patent.

24 In the instant action, the total omission of claims in a certificate of correction is analogous to  
25 pages of missing computer code. It is clear from the public record what the content of these claims  
26 are, but the way to correct the error is not clear on the face of the patent. In Hoffer and Lemelson the  
27 court was able to ascertain and correct the error by merely looking at the patent. Here, as in  
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Southwest Software, the district court must look in the prosecution history for the text of the amended claims. The error in LTC's patent cannot be discerned "simply by reading the patent." Group One, 407 F.3d at 1303. Further, LTC has had actual knowledge of this error in the B1 Certificate for more than ten years and has failed to file for correction; this court declines to retroactively correct it for them.

## II. Intervening Rights Defense

Defendant asserts that it is entitled to the affirmative defense of intervening rights for all accused circuitry that was produced on or before December 26, 1995—the date on which the B2 Certificate issued. Pursuant to 35 U.S.C. section 252, a patent infringer may raise the defense of intervening rights if he or she can demonstrate that the claims asserted in the "reissued patent" are not "identical" to those of the original patent.<sup>4</sup> A "reissued patent, *to the extent that its claims are identical with the original patent*, shall constitute a continuation thereof and have effect continuously from the date of the original patent." 35 U.S.C. § 252, ¶1 (emphasis added). In other words, the doctrine of intervening rights, if found to be appropriate, affords an infringer of a reissued patent an absolute right to make, purchase, or offer to sell otherwise infringing products and a discretionary equitable right to continue to manufacture or sell such infringing products. In effect, the statute enables the infringer to limit him or herself to the payment of damages that are incurred *only* after the effective date of the "reissued" patent as opposed to the effective date of the original patent. Section 252 states in relevant part:

A reissued patent *shall not abridge or affect the right of any person or that person's successors in business who, prior to the grant of a reissue, made, purchased, offered to sell, or used within the United States, or imported into the United States, anything patented by the reissued patent, to continue the use of, to offer to sell, or to sell to others to be used, offered for sale, or sold, the specific thing so made, purchased, offered for sale, used, or imported unless the making, using, offering for sale, or selling of such thing infringes a valid claim of the reissued patent which was in the original patent.* The court before which such matter is in question *may provide for the continued manufacture, use, offer for sale, or sale of the thing made, purchased, offered for sale, used, or imported as specified, or for the manufacture, use, offer for sale, or sale in the United States of which substantial preparation was made before the grant of the reissue, and the court may also provide for the continued practice of any process patented by the reissue that is practiced, or for the practice of which substantial preparation was made, before the grant of the reissue, to the extent and under such terms as*

1        *the court deems equitable* for the protection of investments made or business commenced  
2        before the grant of the reissue.

3        35 U.S.C § 252, ¶2. (emphasis added)

4        Thus, in determining whether an infringer is eligible for the defense of intervening rights, the  
5        court must determine whether the claims asserted in the reissued patent (here the B2 Certificate) are  
6        identical to those asserted in the earlier patent. Since the B1 Certificate has been held to be invalid,  
7        the current claims must be identical to those in the original '741 Patent. The determination of  
8        whether reexamined claims are "identical" is a question of law. See Laitram Corp. v. NEC Corp.  
9        (Laitram IV), 163 F.3d 1342, 1346 (Fed. Cir. 1998). The Federal Circuit has held that "identical"  
10       "means, *at most* 'without substantive change.'" Westvaco Corp. v. Int'l Paper Co., 991 F.2d 735,  
11       741 (Fed. Cir. 1993) (quoting Seattle Box Co. v. Industrial Crating & Packaging, 731 F.2d 818,  
12       827–28 (Fed. Cir. 1984) (emphasis in original). Changes that are made to "merely clarify" or to  
13       "make specific what was always implicit or inherent" has been deemed to not be a substantive  
14       change. Seattle Box Co., 731 F.2d at 828. The Federal Circuit has rejected the argument that any  
15       amendment to the claims during reexamination is *per se* substantive. Laitram Corp. v. NEC Corp.,  
16       952 F.2d 1357, 1361 (Fed. Cir.), reh'g denied, (1992) (quoting Kaufman Co. v. Lantech, Inc., 807  
17       F.2d 970 (Fed. Cir. 1986)). In determining whether the claims are in fact identical, a court must not  
18       consider the claims in a vacuum but must "consider the circumstances of the prior art, the  
19       specification, and the amendments." Id., at 1362.

20       The parties are in dispute over whether defendant has, for Claims 22 and 32,<sup>5</sup> an absolute  
21       intervening right with respect to the 279,655 accused products that were shipped, and the alleged  
22       309,294 of products in inventory, prior to December 26, 1995. They are also in dispute over whether  
23       \$500,000 of costs allegedly incurred by defendant in development of the accused products is  
24       "substantial preparation" within the meaning of section 252. Each of these claims is addressed  
25       below.

26                    A.       Absolute Intervening Rights

27       Defendant asserts that it is entitled to an intervening rights defense because both Claim 22  
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and Claim 32 have been substantially changed from the previously issued patents and thus do not meet section 252's requirement that they be "identical" in scope. Defendant is entitled to absolute intervening rights with respect to both of these claims for the 279,655 accused products that were shipped but not for the amount of products in inventory as of December 26, 1995.

(1). Claim 22

Defendant asserts that Claim 22 (which was not amended during Reexam I), is not identical in scope to the corresponding claim in the '741 Patent. Micrel asserts that the fourth element of Claim 22 ("Element 4") which adds a description of circuitry to the original claim has substantively changed the scope of the claim.<sup>6</sup> LTC responds that this added circuitry element is merely an expression of the structure corresponding to the function described in the second element of Claim 22 ("Element 2"). LTC contends that under a means-plus-function analysis this circuitry is an inherent part of the invention, falling within the literal scope of Element 2, and thus the addition of the circuitry language to the claim has not narrowed the claim's scope.

Under 35 U.S.C. section 112 ¶ 6, any element of a patent's claims that is drafted in "means-plus-function" format must be "construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112 ¶ 6. Thus, "in construing a means-plus-function limitation, a court must identify *both* the claimed function and the corresponding structure in the written description for performing that function." Northrop Grumman Corp. v. Intel Corp., 325 F.3d 1346, 1350 (Fed. Cir. 2003) (quoting Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1258 (Fed. Cir. 1999)) (emphasis added).

Claim 22 states in relevant part:<sup>7</sup>

22. In a switching regulator circuit including a switching transistor having at least one collector, at least one emitter and a base, the switching transistor operable at a chosen point in saturation defined by a ratio of collector current to base current, and further operable over a desired range of collector currents and operating temperatures, a drive circuit comprising:
- [1] means for generating a first base current sufficient to drive the switching transistor to an operating point within the desired range of the chosen point of operation throughout a portion of the desired range of collector currents and operating temperatures;
  - [2] means for variably generating a second base current *the magnitude of which is related to a current conducted by the switching transistor; and*
  - [3] means for combining and providing to the switching transistor the first and second

base currents, *said means for combining and providing including an amplifier circuit the output of which is coupled to the base of the switching transistor; and*  
 [4] *circuitry for adjusting at least one of the first and second base currents to limit the depth of saturation of the switching transistor, said adjusting circuitry providing feedback to an input of the amplifier circuit to increase efficiency of operation of the drive circuit;*  
 [5] wherein the first and second base currents maintain the switching transistor at an operating point in saturation within a desired range of the chosen point in saturation throughout the desired range of collector currents and operating temperatures.

U.S. Pat. No. 4,755,741, col. 16, ll. 37–59.

LTC is correct that under a means-plus-function analysis, Element 4’s added circuitry is structure that corresponds to the function in Element 2. To determine the scope of Element 2, the court must first construe the claimed function, and then the court must look to the patent’s written description for corresponding structures.<sup>8</sup> Northrop, 325 F.3d at 1350. The claimed function for Element 2 is: a “means for variably generating a second base current.” In other words, the function described in Element 2 is the ability to create another base current in a manner which will be subject to variation. The patent’s written description notes that “transistor 314 generates current I3 [the second base current] out of collector 328 when current is drawn through transistor 320, the collector of which is connected to the base and one collector of transistor 314, and through resistor 322 to ground.” U.S. Pat. No. 4,755,741, col. 6, ll. 40–44]. The patent description also notes that:

at low switch currents and non-extreme operating temperatures where current I2 is sufficient to drive the switch into saturation, current I3 is so low so that only a small amount of excess drive current is generated. At higher temperatures, where current I2 is insufficient to drive transistor 300 into saturation, current I3 is increased so that the total available drive current (I2 + I3) is sufficient to ensure that transistor 300 remains in saturation.

U.S. Pat. No. 4,755,741, col. 8, ll. 8–17. In other words, the generation of the second base current is varied, in concert with the initial base current, to meet the needs of the switching transistor. Further, it is clear that this generation of a varied second base current was a key part of the original invention. The fifth element of original Claim 22 states that “the first and second base currents maintain the switching transistor . . . in saturation within a desired range of the chosen point in saturation.” Id. The patent description provides support for this, stating that:

the present invention therefore provides another source of drive current I3 which, in conjunction with current I2 functioning as an offset current, adapts the circuit automatically to variations in collector current through transistor 300 [the switching transistor,] to maintain

a saturation condition and to reduce the variations in the forced current gain of transistor 300 at extremes of current and operating temperature.

U.S. Pat. No. 4,755,741, col. 7, l. 62 - col. 8, l.1.

The circuitry in Element 4 is a means for generating a second base current which varies so as to maintain (and indeed to limit the depth of) the switching transistor in saturation. It is illustrated in figure 3 of the patent and detailed in the patent description. The written description of Patent ‘741 clearly states that:

whereas the above-described *circuitry* ensures that transistor 300 is operated in saturation throughout a wide range of expected currents and operating temperatures, the present invention also provides means for limiting the extent of over saturation of transistor 300. This is *accomplished in the circuit of FIG. 3 by circuitry* including emitter 301 of the transistor 300 shown tied back to the base of transistor 306. Emitter 301 thus prevents transistor 300 from going into saturation substantially beyond a chosen point by providing a path to dispose of drive current which exceeds that necessary to drive transistor 300 to the chosen operating point in saturation.

U.S. Pat. No. 4,755,741, col. 8, ll. 27–39 (emphasis added). This description of circuitry that “adjust[s] . . . at least one of the first and second base currents to limit the depth of saturation of the switching transistor” is precisely what was added to Claim 22 and thus the circuitry described in Element 4 is merely the corresponding structure to the function claimed in Element 2.

However, because Element 4’s circuitry is the corresponding structure to Element 2 of the ‘741 Patent, the importation of this circuitry language from the written description of the patent into the claim narrows the scope of Claim 22. The Federal Circuit has held that “a claim amendment that replaces means-plus-function language with language reciting the corresponding structure narrows the literal scope of the claim.” Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 234 F.3d 558, 589 (Fed. Cir.), vacated on other grounds by, 535 U.S. 722, 741 (2002).<sup>9</sup> In Festo, the patentee removed means-plus-function language regarding a “sealing ring element” from one of its claims and replaced it with the “the structure described in the specification as performing the recited function (‘the corresponding structure’).” Id.<sup>10</sup> The Festo court reasoned that “a claim element recited in means-plus-function language literally encompasses the corresponding structure and its equivalents. In contrast, a claim element that recites the corresponding structure does not literally encompass equivalents of that structure.” Id. Thus, the movement of the description of circuitry

from the patent description into the text of Claim 22 during Reexam II, serves to narrow the literal scope of the claim by removing the equivalents of that structure from its ambit.

In the same respect, the third element of Claim 22 (“Element 3”) has also been narrowed by the movement of structure language from the claim description into the text of the claim. The claimed function in Element 3 is a “means for combining and providing to the switching transistor, the first and second base currents.” The patent description details circuitry that performs this function, noting that:

when switch 338 is first opened, current I2 is generated by current source 312 (plus any current I3) is provided to the base of transistor 306, causing both transistors 306 and 300 to turn on. After a short delay . . . current I2 is increased to a value I2', current I2' being sufficiently high to cause transistor 300 [switching transistor] to be driven into saturation by transistor 306 under most (but not extreme) expected conditions of temperature and current through transistor 300.

U.S. Pat. No. 4,755,741, col. 7, ll. 33–41. Indeed, in its request for reexamination, Micrel also noted that “transistor 306 [is] providing the first and second base currents to switching transistor 300.” Oliver Dec., Exh. 12, at M009694.

Consequently, the addition of language describing this circuitry as including “an amplifier circuit the output of which is coupled to the base of the switching transistor” narrows the scope of the claim as a matter of law because it moves corresponding structure language from the patent description into the claim. *Festo*, 234 F.3d at 589.

(2). Claim 32

Defendant asserts that Claim 32, as amended in the B2 Certificate, is identical in scope to the corresponding claim in the B1 Certificate. As aforementioned, since the B1 Certificate has been held by the court to be invalid for indefiniteness, the B2 Certificate must therefore be identical to the ‘741 Patent in order to defeat a claim for absolute intervening rights.<sup>11</sup> Claim 32 was amended during Reexam I and again during the merged proceedings of Reexam II and III. Plaintiff has conceded that the scope of Claim 32, as amended during Reexam I, is not identical to the scope of Claim 32 or any other claim in the original ‘741 Patent. *See* Jt. Stmt. of Undisputed Facts. No. 25. Claim 32 states in relevant part:<sup>12</sup>

32. A circuit for ~~limiting the depth of saturation of~~ *operating a transistor within a desired range of a chosen point in saturation*, the transistor having a base, at least one collector and at least one emitter, comprising:

[1] a base drive transistor for providing base current to the transistor ~~sufficient~~ to drive the transistor into saturation, the base drive transistor having a base, at least one collector and at least one emitter;

[2] a first diode-junction for producing a first diode voltage; and \_\_\_\_

[3] a second diode-junction for producing a second diode voltage; wherein

[4] said first and second diode-junctions, a base-collector circuit of the transistor are connected serially in a loop such that said first and second diode-junctions are in phase with one another, in phase opposition to the base-emitter junction of the driver transistor, and in phase opposition to the forward voltage drop of the base-collector circuit of the transistor when the transistor is in saturation;

[5] whereby the first and second diode-junctions conduct a current when the base-collector forward voltage of the transistor reaches a predetermined value to limit the amount of current entering the base of the transistor such that the transistor is prevented from operating ~~substantially beyond a chosen point in saturation~~ *at a more saturated point beyond the desired operating range; and further comprising:*

[6] *means for receiving a drive signal related to the current conducted by the transistor and for responsively causing the base current to vary to prevent the transistor from operating at a less saturated point outside of the desired operating range.*

U.S. Pat. No. 4,755,741, col. 18, ll. 13–39.

During Reexam I, LTC clearly added new elements to Claim 32, noting that in addition to earlier statements the claim comprised a “means for receiving a drive signal related to the current conducted by the transistor and for responsively causing the base current to vary to prevent the transistor from operating at a less saturated point outside of the desired operating range.” See Morrill Dec Exh. A at 2. In making these narrowing amendments, LTC noted that the claim “now describes a drive circuit which prevents *both* under-saturation and over-saturation.” See Reexam I, Paper No. 7 at LIN00368 (emphasis added). Thus, necessarily, Claim 32 in the original ‘741 Patent and Claim 32 in the B2 Certificate (which had incorporated the modifications of the B1 Certificate) are not identical; the scope of the claim has changed significantly.

### (3). Summary

Consequently, both Claims 22 and 32, as amended in the B2 Certificate, are not identical to the original patent and defendant Micrel is entitled to absolute intervening rights for the period beginning with the initial infringement in 1994 to the date when the B2 Certificate issued in 1995.

The court declines to rule on the issue of the amount of inventory in existence on December

26, 1995 as this is a material fact that is in dispute. Defendant has submitted documentation asserting that as of the applicable date, it had 309,294 units of inventory. Barker Dec. ¶ 6 and Exh. B. at M007633. Plaintiff has countered that based on allegedly conflicting discovery documentation, the amount of accused products in inventory should not exceed 51,600 units. See Oliver Exh. 45; Barker Dec. ¶13, lines 21–22. Plaintiff argues that based on the declaration of Robert Barker there were 86 wafers in total which would produce, at a hundred percent yield, 51,600 products. Id. This dispute between the parties is genuine and it is over a material fact upon which a reasonably jury could return a verdict in favor of LTC. See Southwall, 54 F.3d at 1575.

B. Substantial Preparation and Equitable Intervening Rights

Defendant asks the court to find that the purported \$500,000 it spent in developing accused products between 1992 and 1994 qualify as “substantial preparation” within the meaning of section 252. Pursuant to the equitable intervening rights doctrine, section 252 grants protection to products that are “not yet in existence.” Shockley, at 1360. Thus, an infringer may, if a court chooses to grant this protection, continue to manufacture, use or sell an otherwise infringing product. 35 U.S.C. § 252, ¶2. Equitable intervening rights is in the discretion of the court and in determining its applicability, the court “must carefully weigh standard equitable considerations.” Seattle Box Co., 721 F.2d at 830. Defendant has not requested that the court grant summary judgment with respect to whether it is entitled to equitable intervening rights, but rather to establish whether the alleged \$500,000 it spent in development of the accused products is “substantial preparation” within the meaning of section 252.

There is no evidence in the record to dispute defendant’s contention, and thus plaintiff has not met its burden to assert, beyond mere allegations and denials, specific facts which demonstrate that there are genuine issues for trial. Fed. R. Civ. P. 56(e). Mircrel has submitted documentation to support its “substantial preparation” claim (see, e.g. Morrill II Dec., Exh CC at MZ632), but plaintiff has not submitted any evidence in opposition.<sup>13</sup> Instead, plaintiff has filed, contemporaneously with its opposition to defendant’s motion for partial summary judgment, a motion for relief pursuant to Rule 56(f) and a motion for sanctions pursuant to Rule 37(b)(2)(A) and Rule 37(d), alleging that

defendants wrongly withheld information with respect to the calculation of inventory and substantial preparation and failed to adhere to this court's order regarding a response to an interrogatory.<sup>14</sup>

Notwithstanding the merits of these claims, plaintiff LTC's motions are untimely and its filings are in direct contravention of the specific instructions of this court as well as its standing orders. July 13, 2005 marked the end of discovery and thus under Civil L. R. 26-2 LTC's discovery motions are untimely because they were filed more than seven days after this cut-off date.<sup>15</sup> In addition, during the June 16, 2003 hearing, the court specifically stated that: "if you have any discovery problems, please contact Mr. Bowser [the Courtroom Deputy]. Please don't file any motions." See Morrill II Dec, Exh. Y. Further, pursuant to Civil L. R. 37-1(a) and (b), litigants before this court are required to "meet and confer" with respect to any discovery disputes and they are barred from filing letter briefs unless by the court's request. Plaintiff asserts that it has met the standing orders' "meet and confer" requirements because of an allegedly long history of correspondence with defendant. However, there is no evidence in the record that with respect to the calculation of inventory and substantial preparation, the discovery facts at issue here, LTC had any complaints about or made any objections to what the defendant proffered before the filing of these motions.<sup>16</sup> These motions appear to be nothing more than a veiled attempt to defeat the summary judgment motion. The motions for relief pursuant to Rule 56 and sanctions pursuant to Rule 37 are therefore denied.

Accordingly, in the absence of any contradicting evidence, the court finds that defendant's expenditure of \$500,000 prior to the issuance of the B2 Certificate is "substantial preparation" under section 252.

### III. Infringement of Re-Designed Products

Defendant Micrel asserts that it is entitled to summary judgment for non-infringement of the B2 Certificate for products manufactured and sold after defendant re-designed its products.<sup>17</sup> Plaintiff concedes that after defendant's re-design, defendant's "manufacture and use" of the products did not infringe the '741 Patent and accompanying certificates. See Pl.'s Responses to

1 Micrel's Requests for Admission Nos. 72–75 (Feb. 18, 2005) in Morrill Dec., Exh. G. However,  
2 LTC contends that its admission did not include attempts by defendant to “sell” or “offer to sell”  
3 these re-designed products “as though no design change had been made.” Pl.'s Opp. at 24:15, 25:11.  
4 In essence, LTC would have the court adopt a subjective test in construing the term “offer to sell” so  
5 that the subjective view of the alleged infringer is dispositive. The Federal Circuit has found that an  
6 “offer to sell” shall be construed using the principles of contract law. Rotec Industries, Inc., v.  
7 Mitsubishi Corp., 215 F.3d 1246 (Fed. Cir. 2000). The subjective views of the alleged offeror are  
8 immaterial. A product is held to be infringing if it is made, used or offered to be sold in the United  
9 States in contravention of a recognized patent. See 35 U.S.C. §271(a). Thus, an “offer to sell” is  
10 infringing if it is made with respect to an infringing product. Section 271 references the offer to sell  
11 a “patented invention” and not the attempt to sell a re-designed and non-infringing product *as if* the  
12 product was still infringing. Here, LTC has conceded that the re-designed products do not infringe  
13 its patent. Thus, any subsequent “offers to sell” these re-designed products are not infringements of  
14 the patent.<sup>18</sup>

15 Moreover, LTC has not met its burden of production on this issue. There is no evidence in  
16 the record to support the assertion that Micrel has made any “offers to sell” infringing products.  
17 LTC submits datasheets of Micrel's as evidence of its continued “offers to sell” the re-designed  
18 products as if no design change had been made. The Federal Circuit has held in this very case that  
19 datasheets do not constitute an “offer to sell.” See Linear, 275 F.3d at 1050. Thus, not only does  
20 this document submission not meet plaintiff's evidentiary burden with respect to offers to sell, it  
21 does not even lend support to its novel theory of infringement. Consequently, defendants are entitled  
22 to summary judgment that the products manufactured and sold after defendant re-designed its  
23 products are non-infringing.

CONCLUSION

For the reasons stated above, defendant's motion for partial summary judgment is GRANTED in part and DENIED in part. The court holds that the B1 Certificate is invalid for indefiniteness. Thus, for both Claim 22 and Claim 32, defendant is entitled to the defense of absolute intervening rights for the 279,655 units of accused products shipped before the issuance of the B2 Certificate on December 26, 1995. Defendant is not entitled to summary judgment regarding the alleged 307,135 in inventory as of December 26, 1995. Defendant is entitled to summary judgment that the \$500,000 it spent in developing the accused products prior to the B2 Certificate's issuance is "substantial preparation" under section 252. Products incorporating defendant's change in design do not infringe any asserted claim.

IT IS SO ORDERED.

Date: November 11, 2005



MARILYN HALL PATEL  
United States District Court Judge  
Northern District of California

**ENDNOTES**

1. The validity of the B1 Certificate is relevant because claims added or altered in a reexamination proceeding have effect as of the publication date of the reexamination certificate. See 35 U.S.C. §§ 307(a), 252. Claims “without substantial change” in a reexamination proceeding have effect as of the date of the original patent or earlier reexamination certificate if there are multiple reexaminations. Id.
2. During oral argument, LTC conceded that it is USPTO administrative procedure to publish the text of amended claims in the reexamination certificate.
3. At oral argument, LTC argued that Southwest was distinguishable because although the missing computer code could be found in the prosecution history, this information was not readily available to a lay observer and had to be reconstructed. Whatever the merits of this argument may be, the Group One court noted that the relevant inquiry is whether the error was evident on the face of the patent. In other words, a district court is empowered to retroactively correct a patent only when “one cannot discern what language is missing simply by reading the patent.” Group One, 407 F.3d at 1303. This was true in Southwest, and it is also true in the present action where the amended claims were omitted in their entirety.
4. Contrary to defendant’s contentions, the burden is on Micrel to establish its affirmative defense for intervening rights. See Jazz Photo Corp. v. International Trade Comm’n, 264 F.3d 1094, 1102 (Fed. Cir. 2001) (noting that although the patentee bears the initial burden of establishing infringement, the burden of establishing an affirmative defense is on the party raising the defense).
5. These are the remaining two claims that are in dispute, as plaintiff has conceded that claims 36–44, 46–47 and 49 are not “identical” in scope to either the B1 Certificate or the original ‘741 Patent. See Jt Stmt. Undisputed Fact Nos. 17, 18, 20, 21, 26–39.
6. Micrel is correct in its assertion that “circuit” or “circuitry” is structure and not a means-plus-function element. See Linear Tech. Corp. v. Micrel, Inc., 379 F.3d 1311, 1320 (Fed. Cir. 2004) (noting that circuitry is a sufficiently definite structure and thus not a means-plus-function element). However, there is no evidence in the record that LTC has contended that the added Element 4 is itself a means-plus-function limitation. LTC contends that the original Claim 22 in the is a means-plus-function claim.
7. The language that was added to the original patent during Reexaminations II and III is emphasized while the language that was removed is crossed out.
8. Micrel misstates the law when it contends that in determining whether the scope of a claim has changed under a means-plus-function analysis, the court must construe only the claimed function and then determine whether that function has itself been changed. Under a means-plus-function analysis, to determine the scope of a claim, the court must make a determination as to the function claimed, and then the court must look to the patent specifications for the corresponding structures. See Northrop, 325 F.3d at 1350.
9. On remand, the Federal Circuit reinstated the holdings of the original case that the Supreme Court did not vacate. See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 344 F.3d 1359, 1366 (Fed. Cir.) (en banc), cert. denied, 541 U.S. 988 (2004).
10. See Festo, 234 F.3d at 580–582 for a description of the claim before and after amendment. Although Festo was a decision that concerned prosecution history estoppel, the fact remains that this holding is controlling as both prosecution history estoppel and reexaminations under section 252 are predicated upon the effect on a claim when there has been a “narrowing of the scope” of the claim.

11. If the B1 Certificate were held to be valid, it is arguable then that the scope of Claim 32 did not change between the B1 Certificate and the B2 Certificate. Defendant argues that the addition of the phrase “and to increase the efficiency of operation of the circuit” to Claim 32 is a narrowing amendment. Def’s Reply at 8–10. It is true that the amendments made during Reexam II and III were to overcome prior art rejects under sections 102 and 103 and it is also true that the Federal Circuit has held that “it is difficult to conceive of many situations in which the scope of a rejected claim that became allowable when amended is not substantively changed by the amendment. *Laitram IV*, 163 F.3d at 1348. However, the Federal Circuit has specifically rejected adopting a *per se* rule that there is a substantive change whenever a reexamination is conducted. *Id.* (quoting *Laitram I*, 952 F.2d at 1361). Moreover, in arriving at this holding, the *Laitram I* court declined to limit their ruling to only section 112 rejections but included those based on prior art under sections 102 and 103—the prior art rejections in the current case. Additionally, the facts in *Laitram* are similar to those in the case at hand. In *Laitram*, the “purpose” of the invention was to produce a high-speed printer, where as here the “purpose” of the invention was to produce a means of limiting transistor saturation so as to “economiz[e] . . . power consumed by the variable drive circuit.” Re-exam II, Paper No. 20 at M010154; *see also Laitram IV*, 952 F.2d at 1363. In other words, the purpose of LTC’s invention was to achieve efficiency. In the background section to the patent, it is clear that a core purpose of this invention is indeed to increase the efficiency of the adaptive transistor drive circuit. *See* U.S. Pat. No. 4,755,741, col. 1, ll. 14–16, 52–58 (noting that “it is desirable to operate a transistor in a saturation condition to improve the efficiency of the transistor” so that “power dissipated by the drive circuit and the power dissipated by the switch transistor [are] . . . minimized.”) LTC’s patented invention attempts to “optimize the overall efficiency of a circuit . . . [by] operat[ing] . . . at a point near the edge of saturation.” *Id.* *See also* Blauschild Dec. ¶¶ 5–9, 16.

12. The language that was added to the original patent during Reexaminations I, II and III is emphasized while the language that was removed is crossed out.

13. Defendant asks the court to find that, pursuant to Civil L. R. 56-2(b), plaintiff’s actions with respect to the creation of a statement of undisputed facts, as well as the absence of any reference to Claim 22 in its opposition, operates as an admission that the claim scope has changed. Defendant claims that plaintiff did not “meet and confer” with respect to the creation of the statement of undisputed facts, as required by the court’s standing orders in Civil L. R. 56-2(b). Rather, defendant contends that plaintiff merely deleted statements with which they had a dispute on the eve of the document’s submission date. *See* Chandler Dec., Exhs. A-F. However, despite the alleged departure by defendant from the requirements of the court’s standing orders, the court declines to construe this as an “admission.” Plaintiff’s silence with respect to Claim 22 is more correctly construed as a failure to meet its evidentiary burden of production. During oral argument, plaintiff asserted that its silence on the issue was due to the lack of the appropriate means-plus-function analysis of the claim by the defendants. Consequently, the court granted the parties an opportunity for further briefing on Claim 22.

14. Plaintiff contends that Micrel did not adequately respond to discovery requests regarding cost-related documents. According to LTC, Micrel claimed to have fully responded to the requests for production (citing documents M005951–53), even though it possessed more documents in its ordinary business records. The documents upon which Micrel now relies on for summary judgment were allegedly produced the day that Mr. Barker (the Micrel employee familiar with these cost-related calculations) was deposed, and they contradict the information provided by Mr. Barker during his deposition. *See* Oliver Dec., Exhs. 40 and 41. Defendant argues in response that LTC was provided with information on inventory and substantial information in May of 2005, and that all that changed between then and the subsequent documents relied on for summary judgment was a decrease in the substantial preparation calculations, yielding \$500,000 as opposed to \$1.4 million, and an increase in the inventory calculations, from 307,135 to 309,264. *See* Morrill II Dec., Exh. CC. Defendant asserts that plaintiff, despite having been served with these “cost-related” documents a full-month before Mr. Barker’s deposition, failed to ask him a single question with respect to these calculations.

1 Contrary to LTC's assertions, Micrel did respond, albeit belatedly, to LTC's 2003 document  
2 requests on March 14, 2005 and again on May 10, 2005. See id. Although these documents had  
3 differing numbers with respect to the calculations for intervening rights, the underlying documents were  
4 themselves produced and LTC did have an opportunity to address them during Mr. Barker's deposition  
5 and declined to do so. Nonetheless, Micrel did supply the updated calculation information on the day  
6 of Mr. Barker's declaration. Micrel had ample opportunity to supplement its discovery at an earlier date,  
7 but instead it waited until the last minute. As a result, the court will limit the amount of inventory upon  
8 which the intervening rights defense may be raised, to the initial calculations presented in Micrel's first  
9 response to the document request— 307,135 products.

10 Micrel asserts that its initial calculation of inventory was 307,635. See Oliver Dec., Exh. CC  
11 M00627. However, there appears to be a calculation error as the sum of the numbers in the document  
12 is actually 307,135.

13 15. Plaintiff wrongly argues that its motions are not discovery disputes, attempting to characterize them  
14 as merely forming part of a "pre-trial dispute." Pl's Rep. at 8. However, by plaintiff's own admission,  
15 the motions relate to the fact that "Micrel prejudicially hid documents" and "prejudicial[ly] disclose[ed]  
16 . . . information" during the discovery process. Id., ll. 13, 22–23.

17 16. It is worth noting that the merits of LTC's claims are unpersuasive. With respect to its Rule 56  
18 motion, LTC does not attempt to set forth any facts that it seeks to obtain through further discovery.  
19 Rather, it concedes that it does not want any additional discovery to occur. "Rule 56(f) requires litigants  
20 to submit affidavits setting forth . . . [such facts and] failure to comply with the requirements . . . is a  
21 proper ground for denying discovery and proceeding to summary judgment." State of California v.  
22 Campbell, 138 F.3d 772, 779 (9th Cir. 1998). Further, although the numbers in the different documents  
23 submitted have changed, it is undisputed that LTC posed no questions about the documents that it did  
24 have to Mr. Barker during his deposition. In the case of the Rule 37(b) motion, it is undisputed that  
25 Micrel timely submitted objections to the interrogatories and thus sanctions under Rule 37(d) are also  
26 inappropriate.

27 17. The parties are also in dispute over when the design change occurred and the exact moment when  
28 Micrel began to sell products that incorporated the change in design. However, these issues are not  
before the court.

18 18. In substance, this claim by plaintiff is more properly conceived of as a claim for "lost profits" or  
19 some form of consequential damages from the sale of the original infringing products and not as a  
20 dispute over what constitutes an "offer to sell."